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APPLICATION NO. FILING DATE		ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,399	10	0/25/2000	Michel Casabona	DE9-1999-0075US1 3668	
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IBM CORPORATION 3039 CORNWALLIS RD.				EXAMINER	
DEPT. T81 /			VU, TUAN A		
REASEARCH TRIANGLE PARK, NC 27709				ART UNIT	PAPER NUMBER
				2124	
			DATE MAILED: 06/19/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)					
Office Auto O	09/696,399	CASABONA ET AL.					
Office Action Summary	Examiner	Art Unit					
	Tuan A Vu	2124					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply sis specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	i6(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed  s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
1) Responsive to communication(s) filed on 10/2	5/2000						
	s action is non-final.						
,		rosecution as to the marite is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims  A\M Claim(s) 1.12 in/ore pending in the application							
4) Claim(s) <u>1-13</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6) Claim(s) 1-13 is/are rejected.							
7) Claim(s) is/are objected to.	alastia d						
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers							
9)⊠ The specification is objected to by the Examiner							
10)⊠ The drawing(s) filed on <u>25 October 2000</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents	have been received.						
2. Certified copies of the priority documents	have been received in Application	on No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
14) Acknowledgment is made of a claim for domestic	•						
a) The translation of the foreign language provisional application has been received.							
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)							
1) Notice of References Cited (PTO-892)	A) [ ]	/DTO 442\ Dames No.42\					
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) Patent Application (PTO-152)					
S. Patent and Trademark Office TO-326 (Rev. 04-01) Office Acti	on Summary	Part of Paner No. 3					

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#### **DETAILED ACTION**

This action is responsive to the application filed October 25, 2000.
 Claims 1-13 have been submitted for examination.

### Specification

2. The disclosure is objected to because of the following informalities: there is a typographical error in the element "cave", p. 25, line 11; it should be – case--.

Appropriate correction is required.

### Claim Objections

3. Claim 1 is objected to because there should not be an extraneous "with" in line 5; and claim 6 is objected to because of the following informalities: there should be a blank space within the recited element "ofintegrating", line 2. Appropriate correction is required.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 1, 2, 4-9, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyle, USPN: 6,141,010 (hereinafter Hoyle), in view of Nguyen et al., USPN: 6,202,070 (hereinafter Nguyen).

As per claim 1, Hoyle discloses a method for maintaining software products implemented in a plurality of files in client computer systems (e.g. Fig. 3) located decentralized relative to at least one central software (e.g. *ADM Server*, *Ad servers* – Fig. 3) maintenance

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institution via a network they are connected with, such method comprising: providing product information in the network system for making it available for said client systems (e.g. banner advertising -- col. 8, lines 36-46; demographic information - col. 8, lines 53-60; updated blueprint - col. 13, lines 48-63); the method characterized by: performing a software maintenance action from the client site by downloading the data required for said maintenance from a set of repositories (e.g. database 44, Ad Servers 50 - Fig. 3; col. 8, lines 47-52; col. 16, lines 37-52 - Note: accessing more than one ad servers to retrieve ad banners is equivalent to more than one repositories of banners; Fig. 13; col. 14, lines 17-26).

But Hoyle does not specify that downloading is from a sequence of repositories, at least one dedicated for one particular client system, and at least one less dedicated for said client.

Hoyle, however, discloses avoiding duplication and unique identifiers (e.g. col. 20, lines 47-66; col. 5, lines 26-34) and customizing according to the client local setting (e.g. col. 8, lines 55-63; col. 16, lines 9-23). Nguyen, in a method to distribute software to customize a bill of material for target machines with database management to eliminate duplicate analogous to the teaching as shown above by Hoyle's download/upgrade method, discloses the use of master database and local database at the distribution/testing site in sequence prior to software storing in the target machines and DBMs transaction operable on unique identifiers (e.g. Fig. 1; col. 4, line 65 to col. 5, line 8; col. 5, line 39 to col. 6; software engineering group, local server database, isolated database -line 37; col. 7, lines 22-60). It would have been obvious for one of ordinary skill in the art at the time the invention was made to implement the set of repositories as mentioned by Hoyle into a sequence of repositories (DBMs) in a global and local hierarchy basis as suggested by Nguyen, because this would use enforce duplicate exclusion from operating on higher level or

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global software list and more local or machine specific list so as to eliminate unnecessary or redundant item; and also would prevent overhead for reconstructing of installable software list or configuration list at a more specify level of the distribution hierarchy, as suggested by Nguyen.

As per claim 2, Hoyle discloses activating of downloaded program by downloading files in a inactive format for a later activation of such program (e.g. steps 264, 266; Fig. 14; components - col. 14, lines 17-27, col. 11, lines 41-49; image files - col. 49 to col. 50, line 17; - Note: downloading of image files and components is equivalent to inactive form of files used for subsequent loading/activation).

As per claim 4, Hoyle discloses the step of upgrading with generating of an input list downloadable from a server repository (e.g. *updated blueprint* – col. 13, lines 48-63; step 256 – Fig. 14); generating a list of files present on the target client system and comparing of those lists (e.g. *current blue print* - col. 20, lines 19-32); and downloading only files which are not yet present in the target system (e.g. col. 20, lines 26-42).

But Hoyle fails to specify that the downloadable input list is retrieved from at least two repositories. But in view of the combined teachings by Hoyle and Nguyen in addressing the use of a sequence of databases to improve the duplication elimination and overhead resource imparting as set forth in claim 1, this limitation herein would have been obvious for the same rationale as set forth therein.

As per claim 5, Hoyle does not specify a total list being a merge of input lists from accessing repositories with a priority of more local files; but discloses a version differential matching of input lists, i.e. *current blueprint* versus *downloaded blueprint* (e.g. col. 20, lines 19-32) with a priority of local files (e.g. step 242 - Fig. 13). But Nguyen, in the method of

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customizing of software install using multiple layers of Database management (e.g. Fig. 1) as mentioned above, discloses the merge of master engineering group database with isolated databases of more specific releases to yield a preinstall database for final download (e.g. *PRISM*, col. 12, line 54 to col. 13, line 11). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the use of multiple server database and file differential matching as taught by Hoyle (e.g. col. 16, lines 37-52; Fig. 13) so to include a merging process applied on software list or input lists, via accessing a hierarchy of databases, or repositories, as suggested by Nguyen. One of ordinary skill in the art would be motivated to do so because using database to merge files would ensure the non-replication so well-known in database management processes; and also would alleviate reconstruction of input files each time a specific built is requested for generating of a final set of to-download components, as well as obviate burden in storage and overhead as suggested by Nguyen (e.g. col. 5, lines 39-47; col. 6, lines 38-51)

As per claim 6, Hoyle does not explicitly disclose a look-aside procedure to access in a neighbor system making it easier for integrating the files in the target system but discloses the local pre-store of component files (*storage 30* – Fig. 2; col. 14, lines 59-65) to alleviate unnecessary downloading of files from remote repositories. The look-aside procedure is implied by Hoyle because the technique of storing in a non-remote environment ready files for use in integrating files into the target system is thus equivalent to the technique as to look-aside for the nearest system which would facilitate the retrieval of files as intended for the upgrade because look aside is analogous to not looking further in the remote repositories.

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As per claim 7, this is a system claim including the step limitations of any of the claims 1, 2, 4, 6 above, hence is rejected herein using either one of the claim rejections corresponding to those claims as cited.

As per claim 8, Hoyle does not disclose a hierarchically arranged repositories system of files but Nguyen discloses a system of hierarchically arranged databases of component files (e.g. Fig. 1, Fig. 7B,9) to be merged into a final pre-install repository of files. This limitation would have been obvious using the same rationale and motivation set forth in claim 1 above by combining the teachings by Hoyle (e.g. *Ad Servers 50* – Fig. 3; col. 8, lines 47-52; col. 20, lines 47-66; col. 5, lines 26-34; col. 8, lines 55-63; col. 16, lines 9-23) to the hierarchy of databases as suggested by Nguyen.

As per claim 9, Hoyle discloses comparing of downloadable update list against list of resident components (e.g. col. 20, lines 19-32; step 242 - Fig. 13) but fails to disclose a overlay repository while Nguyen discloses merging of data to build with rooting out of duplicates via DB data normalization (e.g. Fig. 1, Fig. 7B,9). The merging by Nguyen is recognized as the overlay repository as claimed to yield the delta information as suggested by Hoyle's comparing. It would have been obvious for one of ordinary skill in the art at the time the invention was made to include in the differential extraction technique suggested by Hoyle the elimination of duplicate technique in Nguyen's normalization/merging to yield a database incorporating merge results with no-duplicate (*PRISM*, col. 12, line 54 to col. 13, line 11; Fig. 7B), i.e. overlay repository of delta information, because of the advantages as cited in claim 1.

As per claims 12 and 13, these are computer program and computer-readable medium versions of claim 7, respectively, hence are rejected herein using the same rationale as set forth

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in claim 7 with additional disclosing by Hoyle to meet the computer product and medium limitation as in col. 4, lines 50-58.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyle, USPN: 6,141,010, as applied to claim 1, and further in view of Okanoue, USPN: 5,689,640 (hereinafter Okanoue).

As per claim 3, Hoyle does not disclose a fall back to an older program version by inactivate the newer version and activating the older version but teaches download and activation of downloaded components into the application (e.g. col. 14, lines 17-27). The upgrade of a software component followed by its activation and determination as to whether such activation is successful is a well-known concept in software upgrade, as evidenced by Okanoue, who discloses, in a network service to update files to a plurality of target nodes, a backup copy of the original file reverted to being active if the downloaded update file fails of to activate successfully (col. 1, line 55 to col. 2, line 4; *cutover/rollback* -- Fig. 8). It would have been obvious for one of ordinary skill in the art at the time the invention was made to include the rollback step as suggested by Okanoue to the activation process by Hoyle to use the downloaded files because this would immediately and easily restore the failing system, should it encounters problems in activating the upgrade software file, to its functional state without extraneous clean-up operations or costly operating system complications by reactivating the original backup copy with its inherent machine state.

7. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyle, USPN: 6,141,010, and Nguyen et al., USPN: 6,202,070, as applied to claim 9, and further in view of Nixon et al., USPubN: 2003/0004952 (hereinafter Nixon).

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As per claim 10, Hoyle discloses demographic data for customizing the display of downloaded advertisement components (e.g. col. 5, lines 29-34; col. 8, lines 53-60) but fails to disclose level of repositories having country-level and system-level while Nguyen discloses a hierarchy of databases of for customizing a build of software (re claim 1). Nixon, in a system to update configuration database using interfaces to customize user geographic preferences analogous to the demographic data accommodation in the advertisement display by Hoyle, discloses using of geography/region or language-specific database information to be sent and integrated into at the central configuration location in a same manner (pg. 2, paragraph 0008; pg. 12, paragraph 0083) as suggested in the hierarchy of databases merging technique by Nguyen. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the use of databases by Nguyen and the demographic data by Hoyle to include the use of geography and centralized databases, i.e. country and system based repositories, as suggested by Nixon, in order to accommodate for heterogeneity of data and language across different geographic locations before effecting the merging as suggested by Nguyen for integrating the final component list while taking advantage of database normalization processes such as duplicate elimination.

As per claim 11, Hoyle only discloses local storage of software copies ready for use without retrieval from remote sources (*storage 30* – Fig. 2; col. 14, lines 59-65) but Nguyen discloses replication databases for publishing purposes (col. 12, lines 16-23). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the local storage of banners as suggested by Hoyle to implement replication databases, i.e. shadow repositories, as suggested by Nguyen to help recording of backup data for publishing and

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information divulging purposes or maintaining of backup/legacy of advertising software material.

#### Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - U.S. Pat No. 5,848,421 to Brichta et al., disclosing maintaining of catalog database.
  - U.S. Pub No. 6,493,871 to McGuire et al., disclosing setup program with merge and finalize into packages.
  - U.S. Pat No. 6,292,889 to Fitzgerald et al., disclosing merging of to-have and already-have lists.
  - U.S. Pat No. 6,360,366 to Heath, disclosing network catalog initiated and retrieved by client Launcher.
  - U.S. Pat No. 6,151,643 to Cheng et al., disclosing repositories on server and client side for upgrades.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (703)305-7207. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703)305-9662.

# Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

#### or faxed to:

(703) 746-7239, (for formal communications intended for entry)

or: (703) 746-7240 ( for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., 22202. 4<sup>th</sup> Floor( Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

VAT June 9, 2003

Lacari Chai

KAKALI CHAKI SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100